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ABSTRACT

This review of literature on stress and reading disabilities covers some affective research and theoretical footings. The research is considered in terms of historical research foundations (up to 1979) and recent research findings (1979-1989). The literature relates emotional stress either as cause, effect, or a concomitant aspect of reading disabilities and examines the school and the home as two major arenas of stressors for children. Literature was reviewed on reading disability, stress, school stressors, family stressors, stress and reading problems, assessment of stress in reading, and stress remediation. Sixty references are attached. (Author/MG)

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"The Role of Stress in Reading Disabilities: A Review of Literature"

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RUNNING HEAD:
Stress and Reading Disabilities

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ABSTRACT

This review of literature on stress and reading disabilities covers some affective research and theoretical footings. The research is considered in terms of historical research foundations (up to 1979) and recent or current research findings (1979-89). A few books, several research studies and many position papers relate emotional stress either as cause, effect, or a concomitant aspect of reading disabilities. Two major arenas of stressors for children are the school and the home. A few devices for assessing stress are offered, as are several techniques for the remediation of stress influencing academic performance.

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I. INTRODUCTION

Statement of Problem

Stress in children may hinder the acquisition and development of reading skills, interfere with the application of reading strategies already mastered, and thwart the remediation of reading difficulties.

Purpose of Study

This review of literature is part of the work-in-progress researching the impact of emotional stress on reading failure. The field study aspect of this ethnographic research will involve generating case studies of five reading disabled students based on participant observations in classrooms as well as interviews with the students, their parents, their teachers, and others working with the students.

Research Question

What are students' perceptions about their reading disabilities and the possible impact of stress reading performance? What are the perceptions of parents, teachers, and others regarding reading disabilities and the possible impact of stress on reading performance?

II. THEORETICAL FOOTINGS

Since no specific theory addresses the role of stress in reading and reading failure, the most closely related theoretical footings for this present study are Athey's (1985) work on reading research in the affective domain and Mathewson's (1985) efforts toward generating a comprehensive model of affect in the reading process.

Affective Research - Athey

Some theoretical models draw attention to the significance of affect in a comprehensive view of the reading process, such as Holmes (1948, 1953), Ruddell (1976), and Singer (1976) (all cited in Athey, 1985), but affective factors receive little elaboration.

The affective domain is both large and relatively uncharted (per Athey, 1985), so other related areas of theoretical inquiry also might have much to offer, including five major theories: Self-Concept Theory, Social Learning Theory, Cognitive Style Theory, Attribution Theory, and Metacomprehension Theory.

Social Learning Theory is a basis for Dweck's (1975) studies (cited in Athey, 1985) about anxiety as a frequent accompaniment to learned helplessness. Weiner's (1979) **Attribution Theory** (cited in Athey, 1985) considers the individual's reasoning about the causes of successes and failures. Finally, Athey's (1982) **Metacomprehension Theory** (cited in Athey, 1985) combines La Berge & Samuels' (1976) automatic aspect (cited in Athey, 1985) with monitoring processes studied by Brown (1981) and Flavell (1981)(both cited in Athey, 1985) and metacognitive monitoring including the affective variables of self-concept and anxiety (Athey, 1985). Though these are closely related to the affective issue at hand, none of these specifically discuss the impact of emotional stress on reading.

Affective Model - Mathewson

Historically, the psychological term <u>affect</u> has designated pleasantness/unpleasantness, mood, sentiment, and emotion. This new affective model of reading has four basic affective processes: attitude, motivation, affect, and physical feelings - each influencing the reading process. Value, personality, and self-concept are higher-order interactions of these basic processes. Decision to read is based on and influenced by the four basic affective variables and influences all the processes included within the model's reading process component: physical orientation, attention, and comprehension. Content, format, and form may determine attitude toward reading, which may influence attention and comprehension of reading materials through the decision process. Feedback from the reading processes influence the affective component, suppressing recall and application. During the process of reading, negative affect may accumulate, directly depressing attention and comprehension processes. Following reading, negative attitudes or affect can suppress recall, reflection, and application (Mathewson, 1985). Though this affective theory is closest to the issue of the impact of emotional stress on reading, it still does not directly address the issue.

III. HISTORICAL RESEARCH FOUNDATIONS (Up to 1979)

Reading problems and attempts to remediate them have been reported in research literature since the seventeenth century (Pelosi, 1977; cited in Harris & Sipay, 1985). Much of the cited early research on reading difficulties comes from medical doctors, especially eye surgeons in Great Britain during the 1890s.

Affective Beginnings

Hilgard's survey (cited in Mathewson, 1985) traces the modern origin of the tripartite division study of the mind into cognition, affection, and conation to the eighteenth century when Christian Wolfe introduced two "faculties": knowledge (cognition) and desires (conation). Alexander Gottlieb Baumgarten (1714-1762) added affect (feeling) as a third faculty. Emphasis on these three aspects continued into the early twentieth century. Behaviorism generally ignored affect and conation as did the information processing models of LaBerge and Samuels (cited in Singer & Ruddell, 1985) and computer based models like Rumelhart's Interactive Model of Reading (Singer & Ruddell, 1985).

Cornerstone Foundations

Several key resource persons prominent in the field of reading at least briefly consider affective issues when presenting various aspects of reading and/or difficulties.

Huey (1908), in describing the mental energy and concentration, appears to be at least a chronological benchmark for focusing more specifically on affective issues and reading problems. Subsequently, many researchers have identified a connection between emotional disturbances, loss of concentration, and reading difficulties: eg. Dolch (1931, 1951), Gray (1925)(both cited in Gentile & McMillan, 1987a).

Gibson and Levin (1975) suggest communicative emotional, cultural or educational deprivation contribute to dyslexia, with home environment a strong influence.

Frank Smith (1978) says that children do not learn to read who don't want to: see no point in it; feel hostile toward teacher, school, social or cultural group; expect to fail; believe learning to read will be too costly; prefers self-image of non-reader; have wrong idea of what reading is about; and learned or been taught that reading doesn't make sense.

Other Pre-1979 Foundations

Robinson's (1946) study finds the "most prevalent causes of reading failure were maladjusted homes (in 55% of the sample), visual anomalies (in 50%), emotional problems (in 32%), and incorrect reading methods (in 18%)" (Chall, 1983, p. 172).

Significant studies during the 1950s include Ephron and Holmes. Ephron's (1953) lists anxiety, self-esteem, personality among emotional difficulties in reading problems. Holmes (1955) presents a theoretical consideration of the role of emotions (eg. anxiety, aggression, and withdrawal) in reading difficulties, a summary of possible interrelationships, and some practical implications for school.

The sole contributor of the 1960s makes a significant contribution with his study of several hundred reading disabled students. I.D. Harris' (1961) research posits social class, family disorganization, parental ambition, birth order and parental expectations of maturity, and aggression and submission as emotional blocks to learning.

The 1970s yield several studies that are foundational to today's understanding of emotional stress problems and reading. Abrams & Smolen (1973) discuss stress, failure, and reading problems, viewing the functioning of intellect, vision, and personality as related to stress and effectually sustaining reading disability, and diagrammatically positing the interrelationship of reading stimulus, stress, feelings of inadequacy, and interference to concentration. Laurita (1976) argues that anxiety behaviors may be the cause or the effect of faulty reading. Leeds (1971) reviews several earlier studies to discuss emotions, attitudes, failure, and self-esteem as emotional factors interrelating with reading disabilities. Spache (1976) cites 64 comparative studies in personality traits of good and poor readers that relate emotional maladjustment and reading difficulties. Some of the poor reader traits common among the studies include aggression, passivity, anxiety, poor social skills, discouragement, and helplessness.

Readily observable throughout these three decades are the common emotional concerns of anxiety, failure, self-esteem, stress, and feelings of inadequacy or helplessness relating to reading disabilities and/or as emotional blocks to learning.

IV. RECENT RESEARCH FINDINGS (1979-1989)

Reviewing the literature of the past ten years gives us a clearer perspective of the current trends in research studies relating emotional stress and reading disabilities.

Bartoli and Botel (1988) aptly present an ecological approach to reading and learning disability giving consideration to several overlapping arenas of a student's life. Drawing from recent social interaction and metacognitive research on the comprehension and composing processes, as well as sociolinguistic theory about learning in classroom and communities, their framework for teaching and evaluation is rooted in a wholistic view of the ecosystems of reader, text, and social context, including family dynamics.

Reading Disability

Most texts about reading instruction incorporate reading disabilities, also called reading failure, reading difficulties, reading dysfunction, dyslexia, and sometimes referred to as a Specific Learning Disability (SLD) or a Learning Disability (LD) in the area of reading. Though the learning disabilities and dyslexia models are based on a medical model of organic, constitutional deficit (Coles, 1987), and reading disability, reading failure models are based on the premise that the malady is temporal and correctable (Harris & Sipay, 1985), the common factor is that the student is unsuccessful in handling reading tasks. For continuity throughout this paper, I consider all of the above terms equal to "reading disability".

There is more to helping poor readers succeed in school than teaching them how to read (Gaskins, 1984). Her research study suggests that all roadblocks to a reader's academic success should be identified and a treatment plan devised which addresses both academic (such as poor listening skills, poor attention, and disorganization) and nonacademic problems (such as poor self-concept, poor home support, and inflexibility). Pootsay and Aaron (1982) discuss reading problems from the perspective of reading specialists, viewing factors contributing to reading difficulties including instructional and environmental problems and emotional difficulties. McGill-Franzen (1987) argues that failure to learn to read has been reconceptualized as a problem of disability rather than socioeconomic disadvantage...a changing definition...a policy problem. Williamson (1979) clearly sees emotional adjustment as a factor in reading, which leads us to talk about stress and reading disability.

Stress

"The stresses on children have become stresses on the educational system" (D. Cohen, 1989, p. 7). No wonder most recent texts on reading instruction and remediation address affective issues, especially emotional factors, anxiety, failure, self-esteem, and stress (eg. Chall, 1983; Clay, 1979; Harris & Sipay, 1985; Holdaway, 1979; and Pearson, 1984.)

Some books and some articles of these recent years have specifically focused on stress, especially stress and learning or stress and reading. Barker (1987) offers ways of helping students cope with stress and lists several symptoms of stress, including being overly worried about things, having trouble concentrating, being frequently nervous or depressed, seeking attention constantly, telling lies or stealing, and having frequent headaches or neckaches. But, probably the best-known, most-cogent resource now available for reading professionals is Gentile and McMillan's (1987a) summary of research over the years, assessment of stress with their Stress Reaction Scale for Reading, and several options for intervention of stress and reading difficulties.

School Stressors

Several articles published this past decade suggest that aspects of the learner's school environment contribute to a reading disability (Abrams, 1986, 1988; Barker, 1987; Bartoli & Botel, 1988; Blom et al., 1986; Briggs & Skelton, 1980; Clay, 1987; Gentile, Lamb & Rivers, 1985; Humphrey & Humphrey, 1985; Lang, 1989; Nelson, 1989; Raabe, 1988; Rose, 1989; Warncke, 1981; and Youngs, 1985).

Raabe (1988) lists several stressors in the life of a child that are school-based: beginning school or new school, failure, and problems at school. Schultz and Heuchert's (1983) book presents child stress and the school experience, looking at stress and distress in school, helping children learn to manage stressful school events, adaptive coping skills, and personalized stress management. Humphrey and Humprhey (1985) suggest school stressors include the educative process, teacher behaviors, subject anxiety, test anxiety, and the learning environment (especially for boys).

Family Stressors

Family as a component of the learner's environment that often contributes to the stress of the learner and to the

reading disability is addressed by many articles (Abrams, 1986, 1988; Barker, 1987; Bartoli & Botel, 1988; Bauer, 1987; Blom et al., 1986; Briggs & Skelton, 1980; Burka, 1983; Chall, 1983; Doyle, Gold & Moskowitz, 1984; Humphrey & Humphrey, 1985; Lang, 1987; Nelson, 1989; Raabe, 1988; Rose, 1989; Strother & Barlow, 1985; Warncke, 1981; and Youngs, 1985).

Raabe (1988) lists many stressors in the life of a child that are family oriented: change in living standard, failure, illness or death in family, change in social activities, divorce or separation, breaking family rules, loss of a pet, loss of a parent, Christmas or other holidays, family tension, new member in family, move, drugs or alcohol, personal illness or injury, new eating habits, long vacations, working mother, new responsibilities, and high expectations of parents.

Stress and reading problems

Sometimes learning disabilities create emotional problems; in other cases, the emotional problems come first. Either way,parents and teacher need to understand the complex interaction of organic and affective factors and the role that intrapsychic and interpersonal factors play in learning disabilities (Abrams, 1986). Stress as a cause or effect of reading problems is supported by several. Albes (1982) states that often dyslexia is a result of a child under stress. Blom, Cheney, and Snoddy (1986) detail various aspects of stress in childhood, identifying family-related, health-related, and school-related stressors and offer some supporting research. Briggs and Skelton (1980) propose that the emotional state of a poor reader may provide important insights into the causes of the child's reading problems, and more specifically, children who withdraw from academic activities and social interaction can severely retard their reading development. urka (1983) discusses the emotional reality of a learning disability and how the LD child learns to compensate for the disability. J. Cohen (1986) includes a discussion of emotional factors (eg. low-level depression and high, free-floating anxiety) in his presentation of learning disabilities and psychological development in childhood and adolescence. The relationship of emotions, cognition, and right-left hemisphere functioning indicates that the processing of an acute emotional state in the right hemisphere impedes the shift of cognitive action to the left hemisphere, similar to the impediment depression can create in thinking (Coles, 1987).

Doyle, Gold, and Moskowitz (1984) offer research on the effects of marital discord, divorce, and parental psychopathology as well as the effects of an atypical child on family functioning. Humphrey and Humphrey (1985) discuss in detail stress, helping children understand themselves and about stress, and home and school conditions that can cause stress. Johnston (1985) presents three case studies to aid understanding reading disability, examines the psychological and social determinants of reading failure, and reflects the effects that anxiety, maladaptive strategies, conflicting motives, and causal attributions have on reading ability. Johnston and Winograd (1985) look at passive failure in reading, ie. many of the problems evidenced by poor readers are related to their passive response to the interactive task of reading, including poor self-concept and learned helplessness. Manzo (1987) suggests that 15-20% of reading/learning problems are rooted in emotional difficulties.

Stress Assessment

I found only a few stress assessment devices in this review of literature. Gaskins (1984) uses the Inventory of Roadblocks. Gentile and McMillan (1987a, 1988) offer the Stress Reaction Scale for Reading to determine if the reading disabled student tends to "fight" or "flight" stress reactions to reading tasks. Schultz and Heuchert (1983) present a checklist for assessing school stress as well as a checklist for assessing home-induced stress.

Stress Remediation

A number of references offer a variety of means of remediating the impact of stress on life and especially on reading. Barker (1987) suggests ways of teachers helping students cope with stress as well as creating a low stress environment. Bauer (1987) and Raabe (1988) address what parents can do about childhood stress. Blom et al. (1986) offer prevention strategies and an intervention model for teachers and other professionals. Bradley and Thalgott (1987) present case studies of anxiety being reduced through relaxation and desensitization. Brooks (1987) offers storytelling and the therapeutic process to strengthen both cognitive and emotional functioning including the reinforcement of self-esteem. Similarly, Currant (1985) suggests working with children who have learning and/or emotional problems by using puppets. D. Cohen (1989) advocates joining forces, forming an alliance of sectors of school and

community to aid the most troubled young, collaborating on issues from child abuse to child care. Gaskins (1982) urges ending the reading disabilities/learning disabilities debate by merging the two fields to take advantage of the specialized training of both fields for the benefit of the students. Gentile and McMillan (1987b) advise teaching students self regulating skills (eg. goal setting, self-incentives, and self-monitoring) to deal with feelings of failure and resultant stress reactions. Humphrey and Humphrey (1985) discuss health and fitness for stress (nutrition, diet, exercise, rest, and sleep), controlling emotions, controlling fears, and controlling stress through relaxation, creative movement, and meditation. Schultz and Heuchert (1983) suggest adaptive coping skills, inner meditation, and stress management skills.

SUMMARY/CONCLUSION

In this review of literature on stress and reading disabilities, we have stated the purpose of the study and considered the related theoretical footings of Athey's affective research and Mathewson's Affective Model. Affective research foundations date back to the 1700s with Baumgarten. Key cornerstone foundations were laid in the early 1900s by Huey, later supported by key reading people - Gibson and Levin and Frank Smith. Robinson, Ephron, Holmes, and I.D. Harris suggested emotional difficulties affecting and blocking reading (1940s-1960s). During the 1970s, Abrams co-authored research on stress and failure, Laurita studied anxiety, and Leeds and Spache studied emotional factors with good and poor readers. Research studies on emotional stress issues have increased during the last ten years (1979-1989). Some of the more prominent and/or frequent writers in the current arena include J. Abrams, Athey, Coles, Diener and Dweck, I. Gaskins, Gentile and McMillan, Johnston, Laurita, Manzo, Mathewson, Spache, and Winograd. We reviewed literature on reading disability, stress, school stressors, family stressors, stress and reading problems, assessment of stress in reading, and stress remediation.

Summarizing the impact of emotional stress on reading: "Disabled readers have three strikes against them in our schools: lack of academic success, social maladjustment, and emotional adjustment problems. The first two strikes against them contribute to the third strike against them which in turn, contributes to the intensification of the first two strikes. Thus, the disabled reader may become entrapped in a vicious cycle." (Warncke, 1981, p. 35).

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